

What is claimed is:

1. A method for synchronizing a plurality of clocks wherein at least one of the clocks is associated with a medical device system, the plurality of clocks comprising a first clock and a second clock, the method comprising the steps of:

(a) receiving a selected time associated with the second clock, the selected time different than a reference time that is associated with the first clock, wherein at least the first clock or the second clock is associated with the medical device system; and

(b) setting the second clock to the selected time, in response to step (a).

2. The method of claim 1, wherein the second clock is not associated with the medical device system.

3. The method of claim 1, wherein the first clock is associated with the medical device system.

4. The method of claim 1, wherein step (b) comprises the step of:

(i) setting the second clock by a component of the medical device system that is coupled to the second clock.

5. The method of claim 1, wherein the plurality of clocks comprises a third clock, further comprising the steps of:

(c) receiving the selected time that is associated with the third clock; and

(d) setting the third clock to the selected time, in response to step (c).

6. The method of claim 1, wherein the medical device system provides monitoring or treatment for a nervous system disorder.

7. The method of claim 6, wherein the nervous system disorder is selected from the group consisting of a disorder of a central nervous system, a disorder of a peripheral nervous system, a mental health disorder, and a psychiatric disorder.

8. The method of claim 7, wherein the nervous system disorder is selected from the group consisting of epilepsy, Parkinson's disease, essential tremor, dystonia, multiple sclerosis (MS), anxiety, a mood disorder, a sleep disorder, obesity, and anorexia.
9. The method of claim 6, wherein the nervous system disorder is epilepsy.
10. The method of claim 1, further comprising the steps of:
  - (c) sending a command that is associated with the first clock;
  - (d) determining a delay time between executing step (c) and step (a); and
  - (e) adjusting the selected time using the delay time.
11. The method of claim 1, further comprising the steps of:
  - (c) sending a command that is associated with the first clock;
  - (d) determining a delay time between executing step (a) and step (b); and
  - (e) storing the delay time.
12. The method of claim 1, wherein the selected time is greater than the reference time.
13. The method of claim 1, further comprising the steps of:
  - (c) disabling a commencement of a run mode operation in order to prevent a discrepancy between two recordings of a same event time by the first clock and the second clock;
  - (d) receiving a command to enable the run mode operation, the command being indicative that the selected time approximately equals the reference clock; and
  - (e) enabling the run mode operation by the second clock
14. The method of claim 1, wherein the medical device system is selected from the group consisting of an external system, a hybrid system, and an implanted system.
15. The method of claim 1, wherein the first clock is associated with a monitoring equipment that monitors the patient.

16. The method of claim 1, wherein the second clock is associated with a bedside device that is coupled to a medical implanted device.
17. The method of claim 1, wherein step (a) comprises the step of:  
determining that the reference time approximately equals the selected time by utilizing a Global Positioning System (GPS) clock reference.
18. The method of claim 1, wherein step (a) comprises the step of:  
determining that the reference time approximately equals the selected time by utilizing an atomic clock reference.
19. The method of claim 1, wherein step (a) comprises the step of:  
determining that the reference time approximately equals the selected time by utilizing a time reference through a wireless communications connection.
20. The method of claim 1, wherein step (a) comprises the step of:  
determining that the reference time approximately equals the selected time by utilizing a time reference through an Internet connection.
21. The method of claim 1, wherein step (a) comprises the step of:  
receiving an indication from a user that the reference time approximately equals the selected time.
22. The method of claim 1, further comprising the steps of:  
(c) receiving a current time from the second clock;  
(d) subtracting the current time from the reference time in order to determine a time difference; and  
(e) if the time difference is greater than a first predetermined amount, resynchronizing the first and second clocks.

23. The method of claim 1, further comprising the steps of:

(c) determining to resynchronize the first and second clocks based upon a periodic time criterion;

(d) receiving a subsequent selected time associated with the second clock, wherein the subsequent selected time is different than the reference time that is associated with the first clock; and

(e) setting the second clock to the subsequent selected time, in response to step (b).

24. The method of claim 1, wherein the first clock and the second clock are located in different time zones.

25. The method of claim 1, further comprising the step of:

(c) adjusting the second clock in accordance with a time transition between standard time and daylight savings time.

26. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 1.

27. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 10.

28. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 11.

29. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 13.

30. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 22.

31. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 23.

32. A method for calibrating a plurality of clocks wherein at least one of the clocks is associated with a medical device system, the plurality of clocks comprising a first clock and a second clock, the method comprising the steps of:

- (a) reading a current time from the second clock;
- (b) obtaining the reference time;
- (c) subtracting the current time from the reference time in order to determine a drift time; and
- (d) storing a drift time into a memory.

33. The method of claim 30, further comprising the step of:

- (e) if the drift time is greater than a predetermined amount, resynchronizing the first and second clocks.

34. The method of claim 30, further comprising the steps of:

- (e) notifying a user to calibrate the first and second clocks;
- (f) receiving a selected time, the selected time being different than the reference time;
- (g) receiving an indication that the selected time approximately equals the reference time;
- (h) obtaining the current time from the second clock;
- (i) subtracting the current time from the selected time in order to determine a drift time; and
- (j) storing the drift time into a memory.

35. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 30.

36. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 31.

37. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 32.

38. A method for synchronizing a plurality of clocks wherein at least one of the clocks is associated with a medical device system, the plurality of clocks comprising a first slave clock and a master clock, the method comprising the steps of:

- (a) determining whether to synchronize the first slave clock to the master clock;
- (b) in response to step (a), sending a reference time by the master clock; and
- (c) setting the first slave clock to the reference time.

39. The method of claim 38, wherein the master clock and the first slave clock communicate through a communications channel selected from the group consisting of a wireless channel, an Intranet connection, and an Internet connection.

40. The method of claim 38, the method further comprising the step of:

- (d) setting another slave clock to the reference time, wherein the plurality of clocks further comprises the other slave clock.

41. The method of claim 38, wherein step (a) comprises the steps of:

- (i) receiving a current time of the first slave clock;
  - (ii) determining a difference between the current time and the reference time;
- and
- (iii) if the difference is greater than a predetermined amount, determining whether to synchronize the first slave clock with the master clock.

42. An apparatus method for synchronizing a plurality of clocks in a medical device system, the medical device system providing treatment to a patient with a nervous system disorder, the plurality of clocks comprising a first clock and a second clock, the apparatus comprising:

a user interface;

a communications interface that is coupled to the second clock;

a memory;

a processor that is connected to the user interface in order to receive an instruction from a user, that is connected to the memory and that instructs the second clock through the communications interface, the processor configured to perform the steps of:

(a) receiving a selected time associated with the second clock, the selected time different than a reference time that is associated with the first clock, wherein at least the first clock or the second clock is associated with the medical device system; and

(b) setting the second clock to the selected time, in response to step (a).

43. The apparatus of claim 42, further comprising a Global Positioning System (GPS) clock reference, and wherein the processor is configured to perform the further step of:

(c) determining that the reference time approximately equals the first selected time by utilizing the Global Positioning System (GPS) clock reference.

44. The apparatus of claim 42, further comprising an atomic clock reference, and wherein the processor is configured to perform the further step of:

(c) determining whether the reference time approximately equals the first selected time by utilizing the atomic clock reference.

45. The apparatus of claim 42, wherein the processor is configured to perform the further step of:

(c) receiving an indication from the user through the user interface that the reference time approximately equals the selected time.

46. An apparatus method for calibrating a plurality of clocks in a medical device system, the medical device system providing treatment to a patient with a nervous system disorder, the plurality of clocks comprising a first clock and a second clock, the apparatus comprising:

a user interface;

a communications interface that is coupled to the second clock;

a memory;

a processor that is connected to the user interface in order to receive an instruction from a user, that is connected to the memory, and that instructs the second clock through the communications interface, the processor configured to perform the steps of:

(a) receiving a current time from the second clock;

(b) subtracting the current time from the reference time in order to determine a time difference; and

(c) if the time difference is greater than a predetermined amount, resynchronizing the first and second clocks.

47. The apparatus of claim 46, wherein the processor is configured to perform the further steps of:

(d) reading the current time from the second clock;

(e) obtaining the reference time;

(f) subtracting the current time from the reference time in order to determine a drift time; and

(g) storing a drift time into the memory.



48. The apparatus of claim 47, wherein the processor is configured to perform the further step of:

(h) if the drift time is greater than the predetermined amount, resynchronizing the first and second clocks.

49. The apparatus of claim 46, wherein the processor is configured to perform the further steps of:

(d) notifying a user to calibrate the first and second clocks;

(e) receiving a selected time, the selected time being greater than the reference time;

(f) receiving an indication that the selected time approximately equals the reference time;

(g) obtaining the current time from the second clock;

(h) subtracting the current time from the selected time in order to determine a drift time; and

(i) storing the drift time into a memory.

50. The method of claim 17, wherein step (b) is performed if a time difference between the first clock and the second clock exceeds a predetermined limit.

51. The method of claim 18, wherein step (b) is performed if a time difference between the first clock and the second clock exceeds a predetermined limit.

52. The method of claim 17, wherein step b) is performed periodically at a prespecified interval.

53. The method of claim 18, wherein step (b) is performed periodically at a prespecified interval.